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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,803	02/12/2004	Darryl Franklin Clark	14543.1	5836

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KIMBERLY-CLARK WORLDWIDE, INC.
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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,803

Applicant(s)

CLARK ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-37 is/are pending in the application.
- 4a) Of the above claim(s) 31-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 18 - 30 in the reply filed on April 25, 2005 is acknowledged. Claims 31 – 37 are withdrawn from further consideration as being drawn to a nonelected invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 18, 19, 21, 24, 25, 27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Newkirk et al. (6,417,121).

Newkirk et al. discloses a nonwoven fabric made from multicomponent fibers wherein at least one component is formed of a multipolymer blend (abstract). The blends preferably have polyethylene and polypropylene components (column 3, lines 15 – 25). The second component can be formed from known polymers including polyolefins such as polypropylene (column 11, lines 40 – 45). This component can be a single polymer component instead of a blend (column 7, lines 5 – 10). Thus, the single component would be crystalline while the blend material would be amorphous. The nonwoven material can be made by meltblowing which inherently produced fibers having a diameter of less than 7 micrometers (column 3, lines 36 – 38). Further, the

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nonwoven can be bonded to additional layers including meltblown microfibers (column 4, lines 48 – 55).

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20, 22, and 23 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Newkirk et al.

The features of Newkirk et al. have been set forth above. Although Newkirk et al. does not explicitly teach the limitations crystallinity, hydrohead, and air permeability, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. multicomponent fibers comprising polyolefin components) and in the similar production steps (i.e. extruding small diameter fibers to form a web) used to produce the nonwoven fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by Newkirk et al. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed crystallinity ranges, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the

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art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215. Newkirk et al. discloses using blends to optimize the properties of the finished fabric. Thus, one would be motivated to use fibers having high crystalline values to add strength and stability to the fabric, while using the blended component to optimize the abrasion resistance, softness, and touch of the fabric.

Claim Rejections - 35 USC § 103

6. Claims 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newkirk et al.

The features of Newkirk et al. have been set forth above. Newkirk et al. discloses that the nonwoven fabric can be combined with additional layers such as nonwoven meltblown webs. When adding additional layers it well known in the art that it is important that the materials are compatible with each other so that the fabrics will form strong bonds when thermally bonded together. Thus, it would have been obvious to one having ordinary skill in the art to add a nonwoven fabric made from polypropylene meltblown fibers since polypropylene fibers would be thermally compatible to polypropylene blends. Thus, claim 30 is rejected.

Further, it would have been obvious to one having ordinary skill in the art to use multicomponent meltblown layers to control or optimize the properties such as loft, strength, stability, and touch in both layers of the fabric as suggested by Newkirk et al. Therefore, claim 28 is rejected.

7. Claims 18 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger et al. (4,729,371) in view of Aishima et al. (3,900,678).

Krueger et al. discloses a nonwoven webs made of meltblown bi-component fibers having a diameter of less than 10 mm (column 1, lines 26 – 28). The diameter of the bi-

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component fibers can be less than 5 or even 1 micrometer (column 3, line 41). The meltblown webs made from bi-component fibers are loftier than conventional meltblown fiber webs and the webs also have lower pressure drops and higher filtration efficiencies (column 1, lines 58 – 66). Krueger et al. teach that the fibers can be formed from a wide variety of fiber forming polymers including polyethylene, polypropylene, polyethylene terephthalate, polyamides, and blends thereof (column 4, lines 25 – 34). An example of a particular bi-component combination is polyethylene and polypropylene (column 4, lines 28). Also, Krueger et al. disclose that the nonwoven web can be laminated to other webs or films by bonding to form laminates (column 4, lines 10 – 19).

Krueger et al. fails to teach using crystalline propylene polymers and amorphous polyalphaolefin components as the components of the bi-component fiber. Aishima et al. is drawn to bi-component fibers. Aishima et al. teaches using a crystalline polypropylene and a random or block copolymer of polypropylene and another olefin as the components of the bi-component fiber (abstract). Aishima et al. teach that the bi-component fiber has superior crimpability and a favorable hand as well as excellent mutual adhesion (column 1, lines 56 – 60). Therefore, it would have been obvious to one having ordinary skill in the art to use these components as the components of the bi-component meltblown fibers taught by Krueger et al. to improve the crimpability and hand of the fibers.

Although Aishima et al. fails to teach the crystallinity of the fiber's components it is presumed that the components have the claimed crystallinity. Aishima et al. discloses that the crystalline polypropylene is produced by a stereospecific polymerization catalyst (column 2, lines 62 – 66), which would inherently produce a highly crystalline polymer. Further, the second

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component which is a copolymer of polypropylene and another olefin (column 3, lines 15 – 27) are similar to the copolymers that Applicant discloses using as the second component on page 8 of the specification. Thus, claims 18 – 22, 24, 25, and 26 are rejected.

Additionally, although the limitations of hydrohead and airpermeability are not explicitly taught by Krueger et al. or Aishima et al., it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. polyolefin bicomponent fibers) and in the similar production steps (i.e. meltblowing small diameter fibers) used to produce the nonwoven fabric. The burden is upon the Applicant to prove otherwise. Thus, claim 23 is rejected.

8. Claims 27 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger et al. and Aishima et al. as applied to claim 18 above, and further in view of Newkirk et al.

The features of Krueger et al., Aishima et al., and Newkirk et al. have been set forth above. Krueger et al. discloses that the nonwoven web can be bonded to additional layer. Newkirk et al. teaches that the multilayer laminates can be made by adding additional meltblown webs to a first layer. Thus, it would have been obvious to one having ordinary skill in the art to add an additional meltblown layer to the fabric to optimize the properties of the fabric and reinforce the first layer with an additional nonwoven web. Further, it would have been obvious to one having ordinary skill in the art to use a polypropylene meltblown fabric so that the material is thermally compatible with the first layer. Finally, using a multicomponent meltblown layer would give one of skill in the art the opportunity to optimize the properties of the fabric as disclosed by Newkirk et al. Therefore, claims 27 – 30 are rejected.

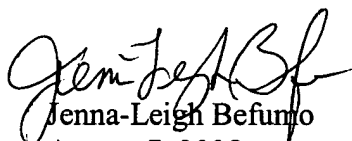
Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jenna-Leigh Befumo
August 7, 2005